Aufhauser Corporation

Tel. 212-246-0205 Fax 212-246-0158
sales@brazing.com www.brazing.com

Safety Data Sheet

1. Supplier and Manufacturer

Aufhauser Corporation
39 West Mall
Plainview NY 11803 USA
Telephone: 516-694-8696 www.brazing.com
Emergency Phone Number: 516-694-8696 or 212-246-0205
24-hour Emergency Response: 212-246-9420 or 911
SDS Number: **Gold containing alloys 202304**
Product Use(s): Brazing/Soldering Alloys (for list of products see Annex)

SCAN CODE FOR PDF
OF THIS DOCUMENT

2. Hazards identification

Classification(s)

Health Hazard: Respiratory Sensitivity 1B - may cause allergy or asthma symptoms or breathing difficulties if inhaled.
Skin Sensitivity: May cause an allergic skin reaction.

Label Symbol(s): Health Hazard, Exclamation Point
Label Signal Word(s): Warning, Danger

Label Hazard Statement(s)

May cause allergy or asthma symptoms or breathing difficulties if inhaled.
May cause an allergic skin reaction.

Label Precautionary Statement(s)

Avoid breathing dust/fume/gas/mist/vapors/spray.
Wear protective gloves/protective clothing/eye protection/face protection.
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
IF ON SKIN: Wash with plenty of soap and water.
Dispose of contents/container in accordance with local/regional/national/international regulations.

3. Composition/information on ingredients

Ingredient	*% wt*	*CAS #*	*EINECS #*	*PEL mg/m³*	*TLV-TWA mg/m³*	*TLV-STEL mg/m³*
Tin	*	7440-31-5	231-141-8	2	2	-
Silver	*	7440-22-4	231-131-3	0.01	0.1	-
Gold	*	7440-57-5	231-165-9	N.E.	N.E.	N.E.
Copper	*	7440-50-8	231-159-6	0.1	0.2	-
Indium	*	7440-74-6	231-180-0	0.1	0.1	-
Zinc	*	7440-66-6	231-175-3	N.E.	N.E.	N.E.
Cadmium	*	7440-43-9	231-152-8	0.005	0.01	-
Antimony	*	7440-36-0	231-146-5	0.5	0.5	-

Nickel	*	7440-02-0	231-111-4	1	1.5	-
Silicon	*	7440-21-3	231-130-8	15	10	-
Germanium	*	7440-56-4	231-164-3	N.E.	N.E.	N.E.

*See alloy table Annex
N.E. = Not Established
TLV= time weighted average
STEL=short term exposure limit

4. First aid measures

Eye Contact: Hold eyelids apart and flush eyes with plenty of tepid water for at least 15 minutes. Seek medical attention if irritation persists.
Ingestion: If patient is conscious, ONLY induce vomiting as directed by trained personnel. NEVER give anything by mouth to an unconscious person. Seek medical attention immediately.
Inhalation: Remove to fresh air. If not breathing, give artificial respiration or oxygen by trained personnel. Seek immediate medical attention.
Skin Contact: Remove contaminated clothing. Wash affected area with soap and water. Wash clothing before reuse. If irritation persists, obtain medical attention.

5. Firefighting measures

Fire and Explosion Hazards: In case of fire, the following can be released: Carbon monoxide (CO), Nitrogen oxides (NOx), Carbon dioxide (CO_2), tin, zinc, copper compounds and a variety of metal oxides. Rosin core may be degraded to produce aliphatic aldehydes, acids and terpines. Molten material can present significant thermal hazard to fire fighters.
Extinguishing Media: Suitable extinguishing agents: CO_2, dry sand, sodium chloride, or dolomite. Water, A/B/C extinguishers and halogenated agents are not recommended.
Fire Fighting Instructions: If fighting a fire in which this product is present, wear a self-contained breathing apparatus with full face piece operated in pressure-demand or other positive pressure mode.

6. Accidental release measures

Methods and Materials: Melted solder will solidify on cooling and can be scraped up. Use caution to avoid breathing fumes if a gas torch is used to cut up large pieces.
Personal Precautions: Ensure adequate ventilation.
Environmental Precautions: Prevent spills from entering sewers or contaminating soil.

7. Handling and storage

Handling Precautions: Use only in well ventilated areas.
Work and Hygiene Practices: To prevent ingestion following use of the product, wash hands and face before eating, drinking, applying cosmetics, or using tobacco. Remove contaminated clothing or protective equipment before entering eating/drinking areas.
Storage Precautions: Store in a cool location away from incompatible materials (see Section #10).

8. Exposure controls/personal protection.

Engineering Controls: Local exhaust ventilation is required to control any air contaminants when melting, cutting burning or performing other activities where there is a potential for airborne contamination and exposure. Avoid potential breathing of fume and dust. Ensure controls are used.
Personal protection:
Eyes: Chemical safety glasses/goggles. Face shield recommended when handling molten metal and when grinding or cutting.
Respirator: An authority approved or compliant marked air-purifying respirator with a fume/dust chemical cartridge is recommended under certain circumstances where airborne concentrations are expected to be elevated. Warning: Air purifying respirators do not protect the worker in oxygen-deficient atmospheres. Avoid breathing dusts and fumes.
Skin: Wear protective gloves. Hot gloves for handling molten metal.
Other: Eye-wash fountain/shower in work area. Avoid the use of contact lenses in high fume and dust areas.
Work/Hygienic Maintain good housekeeping. Clean up spills immediately. Good personal hygiene is essential. Avoid eating, smoking or drinking in the work area. Wash hands thoroughly with soap and water immediately upon leaving the work area. Follow established governmental guidelines when handling certain metals such as cadmium.

9. Physical and chemical properties

Appearance: solid metal
Odor: odorless
Melting point: see product list
Boiling point: not available
pH: not applicable
Density: see product list
Solubility in water: insoluble
Vapor density: not available
Vapor pressure: not available

10. Stability and reactivity

Stability: Normally stable.
Reactivity: Chemical stability - thermal decomposition/ conditions to be avoided: No decomposition if used according to specifications.
Possibility of hazardous reactions: No dangerous reactions known
Conditions to avoid: No further relevant information available.
Incompatible Materials: Strong acids, strong oxidizers, strong bases, sulfur, halogens.
Potential Hazardous Decomposition Products: No dangerous decomposition products known.

11. Toxicological information

Carcinogenicity: NTP (National Toxicity Program): Yes – Nickel
OSHA (Occupational Safety & Health Administration): Yes - Cadmium
IARC (International Agency for Research on Cancer): Yes – Nickel and Cadmium
LD50: Not established.
LC50: Not established.
Other: Nickel RTECS# QR5950000
Cadmium RTECS# EU9800000
Indium RTECS#NL1050000
Silver RTECS#VW3500000
Copper RTECS#GL5325000
Antimony RTECS# CC4025000
Cadmium: Product contains <1% cadmium mixture.

Inhalation, human, 39 mg/m3, LCLO
Oral, rat, 2330 mg/kg, LD50
Women, inhalation, dose: 129 ug/m^3, 20 years
Chronic Exposure: Teratogen/Mutagen/Reproductive Hazard

12. Ecological information

Product mixture not tested. Known testing data and other information available on each metal found in chemical journals and other publications.
Product mixture could contain cadmium <1 % of the mixture ingredients of unknown hazards to the aquatic environment.

13. Disposal considerations

Waste treatment methods: Disposal must be made according to official regulations. Do not allow product to reach sewage system, soil or ground water.
Uncleaned packaging: Disposal must be made according to official regulations.
EPA waste number: Silver: D011, regulated level: 5.0 mg/L.

14. Transport information

Transport in accordance with applicable regulations and requirements. Not regulated under US DOT (United States Department of Transportation).

Solid Metal mixture: Non-hazardous under shipping.
UN- none
North American Emergency Guide Book – Not applicable
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15. Regulatory information

USA The following information relates to product regulation specific to the USA.
SARA (Superfund Amendments and Reauthorization Act)
Section 355 (extremely hazardous substances):
None of the ingredient is listed.
Section 313 (Specific toxic chemical listings):
Silver, Zinc (fume), Nickel, Antimony, Copper.
TSCA (Toxic Substances Control Act): Certified that all components listed below for the subject finished product are on the TSCA Inventory of Chemical Substances and are not subject to any chemical specific regulation under TSCA Section 12(b) export notification requirements delineated at 40 CFR part 707, subpart D.
All ingredients are listed or exempt from listing.

California Proposition 65

· Chemicals known to cause cancer: nickel, cadmium, antimony (as oxide, trioxide)
· Chemicals known to cause reproductive toxicity for females cadmium
· Chemicals known to cause reproductive toxicity for males: cadmium
· Chemicals known to cause developmental toxicity: cadmium

State Regulatory Information
Some components are listed.

Carcinogenic categories
Nickel (7440-02-0): IARC Group 2B (Possibly carcinogenic to humans), US NTP: R (Reasonably anticipated to be a human carcinogen), US EPA Group A (Human carcinogen). ACGIH Category A5 (Not suspected as a human carcinogen).

CANADA:
Workplace Hazardous Materials Identification (WHMIS):
This product has been classified in accordance with the hazard criteria of the Canadian Controlled Products Regulation (CPR) and the Safety Data Sheet (SDS) contains all of the information required by the CPR.
WHMIS Symbols: D2B (for plastic core)

16. Other information including information on preparation and revision of the SDS

HMIS Ratings:
Health - 2
Flammability – 0
Reactivity – 0

Date of Preparation: 2023-04

Disclaimer
Although reasonable care has been taken in the preparation of this document, we extend no warranties and make no representations as to the accuracy or completeness of the information contained therein, and assume no responsibility regarding the suitability of this information for the user's intended purposes or for the consequences of its use. Each individual should make a determination as to the suitability of the information for their particular purpose(s).
Aufhauser Corporation

Annex: Product List - Gold containing alloys

% Au	% Sn	% Si	% Ge	% In	% Ag	% Sb	% Ni	% Cu	% Zn	% Cd	**Density**	**RoHS Compliance**
75	-	-	-	25	-	-	-	-	-	-	13.70	Yes
82	-	-	-	18	-	-	-	-	-	-	14.90	Yes
80	20	-	-	-	-	-	-	-	-	-	14.51	Yes
88	-	-	12	-	-	-	-	-	-	-	14.67	yes
96.76	-	3.24	-	-	-	-	-	-	-	-	15.4	yes
38	-	-	17	-	45	-	-	-	-	-	10.58	yes
98	-	2	-	-	-	-	-	-	-	-	16.92	yes
80	-	-	-	-	-	-	-	20	-	-	15.67	yes
82	-	-	-	-	-	-	18	-	-	-	15.92	yes
50	-	-	-	-	50	-	-	-	-	-	13.60	yes
99.4	-	-	-	-	-	0.6	-	-	-	-	19.08	yes
100	-	-	-	-	-	-	-	-	-	-	19.30	yes
10	90	-	-	-	-	-	-	-	-	-	7.78	yes
9.5	90	-	-	-	-	0.5	-	-	-	-	7.73	yes
70	30	-	-	-	-	-	-	-	-	-	13.65	yes
73	27	-	-	-	-	-	-	-	-	-	13.35	yes
75	25	-	-	-	-	-	-	-	-	-	13.56	yes
78	22	-	-	-	-	-	-	-	-	-	14.16	yes
79	21	-	-	-	-	-	-	-	-	-	14.33	yes
79.2	19.8	-	-	-	1	-	-	-	-	-	14.45	yes
81.05	0.62	-	-	-	7.7	-	-	7.4	2.6	0.63	15.92	no
81.5	-	-	10	-	8.5	-	-	-	-	-	14.47	yes
87	-	-	12	1	-	-	-	-	-	-	14.49	yes

RoHS 2 – 2011/65/EU